

4.6 Slope-Intercept Form of Linear Equations

$$y = mx + b$$

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In the formula, m is the _____
and b is the _____ .

The y-intercept is where the line
crosses _____ .

Identify the slope & the y-intercept for each equation.

1) $y = \frac{3}{4}x + 7$

2) $y = -\frac{1}{7}x + 2$

3) $y = -2x - 3$

$y = x - 6$

4) $y = -x + 12$

5)

Rewrite each in slope-intercept form.
Then identify the slope and the y-intercept.

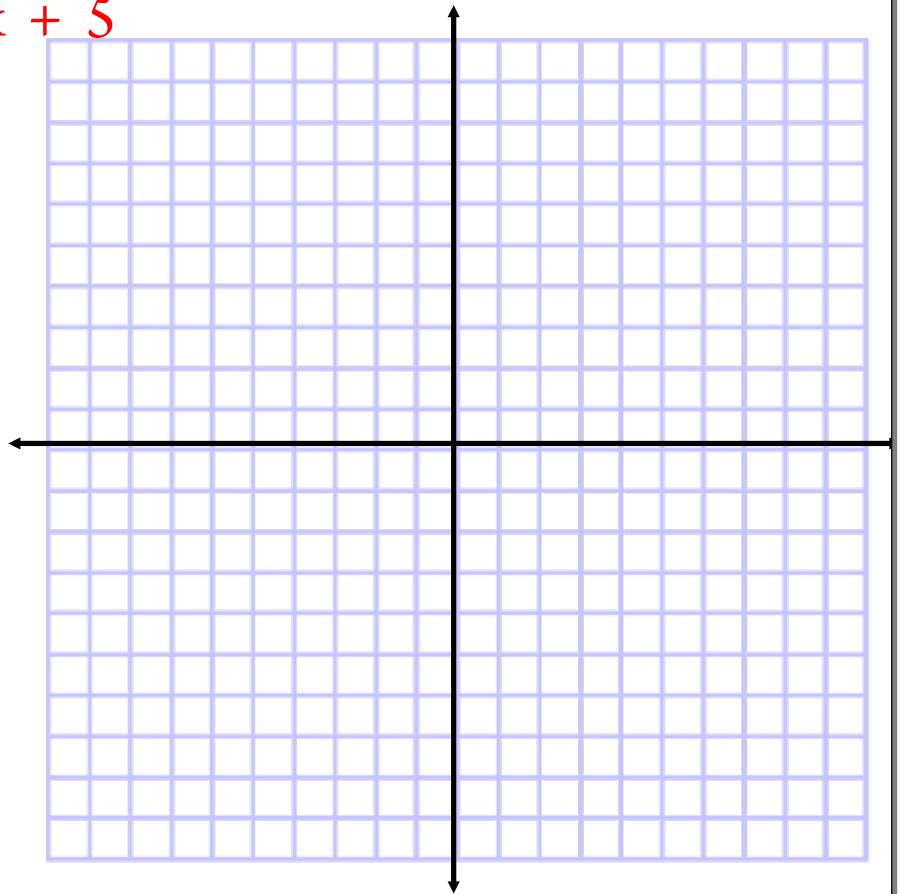
1) $3x + 4y = 8$ 2) $2x - y = -1$

3) $2x - 3y - 6 = 0$

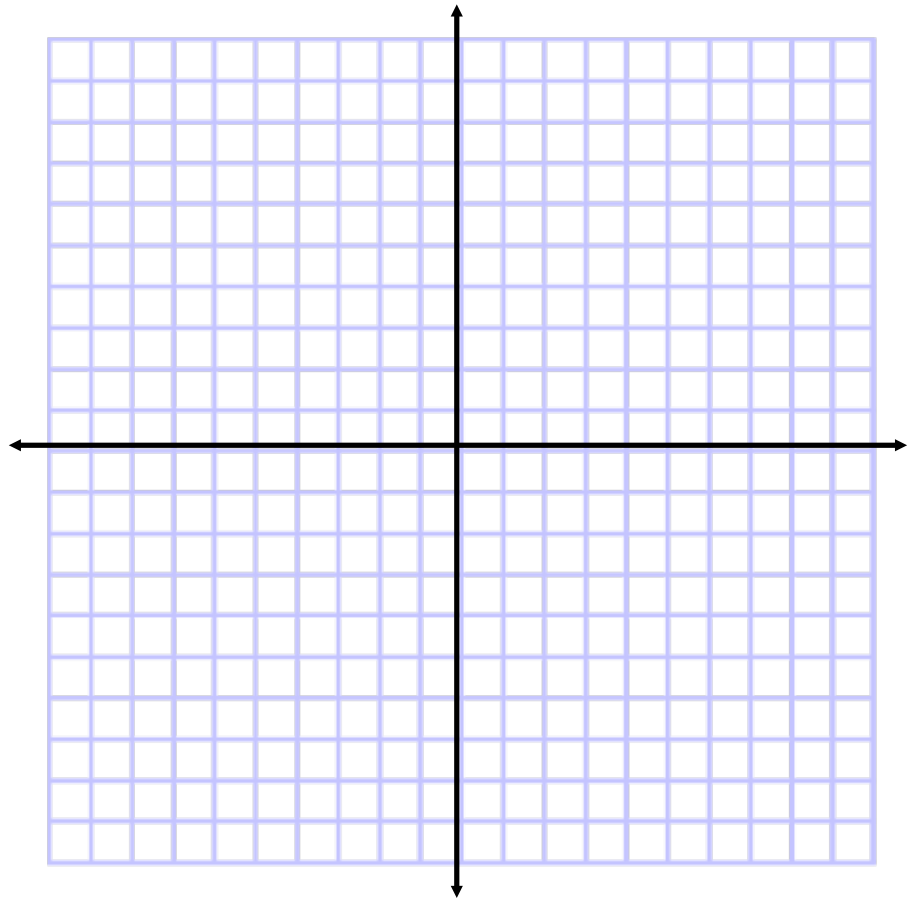
Graphing Using Slope-Intercept Form

Graph each equation using Slope-Intercept Form.

A) $2x + 3y - 4 = x + 5$



B) $4x - y - 3 = 0$



Graph each line.

A) $3y = -9x - 15$

$y = -3x - 5$

$m = -\frac{3}{1}$

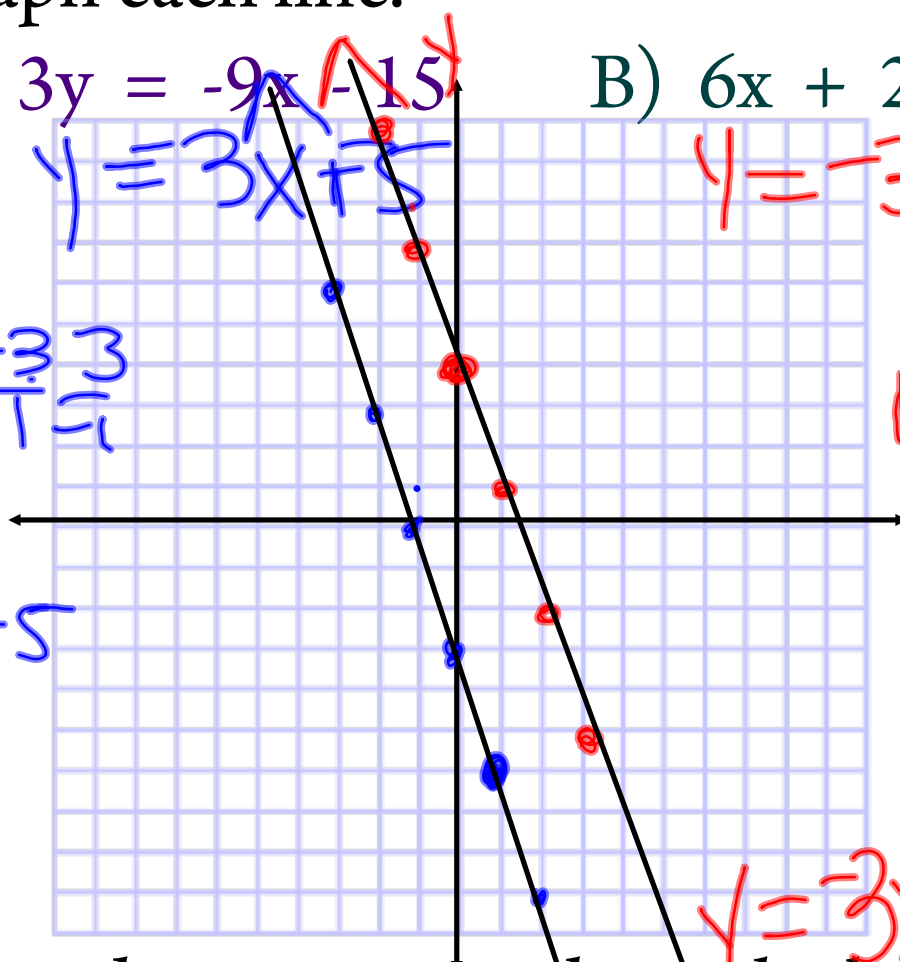
$b = -5$

B) $6x + 2y = 8$

$y = -3x + 4$

$m = -\frac{3}{1}$

$b = 4$



What do you notice about the lines?

What do you notice about their slopes?

$y = -3x + 4$
 $y = -3x - 5$

Graph each line.

A) $y = -\frac{1}{3}x - 4$

$m = -\frac{1}{3}$

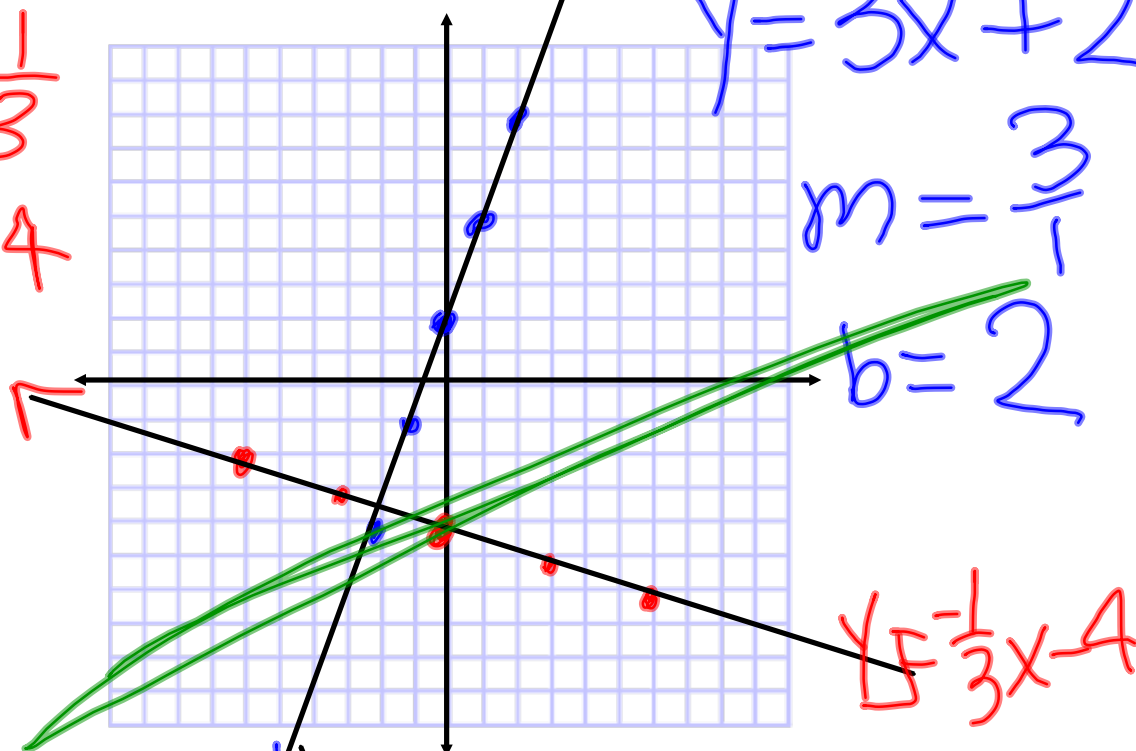
$b = -4$

B) $y = 3x + 2$
 $3x - y = -2$

$y = 3x + 2$

$m = \frac{3}{1}$

$b = 2$



What do you notice about the lines?

What do you notice about their slopes?

Planner Time!